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2017 HRP IWS, Galveston, TX
Communications Session Abstract
Jan. 25, 2017

The OMICS of Sports & Space

How Genomics is Transforming Both Fields

Join top 10 *New York Times* Bestseller "[The Sports Gene](#)" author David Epstein and NASA Twins Study investigator Christopher E. Mason, Ph.D., in the debate as old as physical competition—nature versus nurture.

From personal experience, Epstein tackles the great debate and traces how far science has come in solving this timeless riddle, and how genetics has entered into the field of sports. He's an investigative science reporter for *ProPublica* and longtime contributor to *Sports Illustrated*. Epstein will share insights into performance-enhancing drugs, the lucky genetics that separate a professional athlete from a less talented athlete, and his research into the death of a friend with Hypertrophic Cardiomyopathy (HCM).

From an epigenomic viewpoint, Mason examines the benefits and risks for astronauts who face extreme spaceflight conditions and what it means for the future of human space travel. He is an associate professor in the Department of Physiology and Biophysics, The Feil Family Brain and Mind Research Institute (BMRI) & The Institute for Computational Biomedicine at Weill Cornell Medicine. He is also part of the Tri-Institutional Program on Computational Biology and a Medicine Fellow of Genomics, Ethics, and Law in the Information Society Project at Yale Law School.

The study of omics shows tremendous potential in prevention, diagnosis and treatment of injuries and diseases but genetic discrimination and molecular privacy concerns are raised in both sports and space.